ABSTRACT OF THE DISCLOSURE

An apparatus including a first hollow fiber membrane module, baffle assembly, and fluid source. The module includes a plurality of elongated hollow fiber membranes located generally in adjacent, parallel relationship to each other. Each of the membranes includes a generally cylindrical wall having a first end and a second end. The module also includes a module housing that supports the membranes. The module is configured to be positionable within the conduit and further to be matable with a similarly configured module. The baffle assembly is located within the conduit and configured to direct the flow of a first fluid through the module. The fluid source directs a second fluid to flow through the membranes from the first end to the second end. A predetermined substance is transmitted through the membranes' walls, to modify the concentration of the predetermined substance in the first fluid.